The Physics of Space, Time and Flying Saucers

A new understanding of the space-time continuum may be the key to faster-than-light space travel.

by Ted Roach © 1997

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TIME AND MOTION

The concept of time may be difficult to grasp. Although it is associated with our understanding of time as measured by a clock, it is an outward measurement. Time is related to motion.

Consider a journey in an aeroplane. As the aircraft increases its velocity, an acceleration is felt until a constant speed is reached. Once the craft reaches a constant velocity, one can remove the seat-belt and walk around the cabin as if stationary on the ground. Only if there is turbulence, a change in the direction of motion of the plane, or a window to view passing clouds, is it realised that the plane is not stationary on the ground. The passengers and the plane have changed their velocity and, in so doing, their unit of time. All else is the same.

Consider also a raft floating down a uniformly flowing river. If the river has a constant velocity, then the raft travels with the same velocity. The raft requires no motor to stay with the flow. No force is required for any floating debris to stay with the flow. The raft reaches a constant velocity and maintains it. In others words, the raft and its occupants reach a constant time change, and no force is required to maintain that time change. The river is not a force field to the raft; it is a constant velocity field, or, in time physics, a constant time field. The particles making up the river are all travelling at a constant time. The raft is in the field and requires no force to maintain its velocity.

It may appear to an observer on the bank of the river that the raft is being carried down the river and is therefore being pushed by a force, but no force is required. Someone falling out of the raft would be carried down the river along with the raft. Rubbish thrown out of the raft would travel with the raft.

If the occupants of the raft decide to stop in the flow of the river by tying up to an old tree stump, then a force is required between the stump and the raft via a rope to prevent the raft moving in the river. A force is required to stop the raft in the river so it does not keep moving with the flow.

If the raft on its voyage down the river starts going over some rapids, the raft, along with the water in the river, begins to accelerate. Again, the occupants feel no force. They naturally go with the flow.

Consider, now, a capsule falling freely, without air friction, towards the Earth. An observer on the Earth's surface considers the capsule to be under the influence of a force because it is accelerating at 'g' metres/sec/sec. However, an occupant of the capsule experiences no forces and is weightless. Any unrestrained water-bubbles in the capsule form perfect spheres and 'float' in the capsule. Only when the occupant of the capsule looks out of the window and observes the Earth rushing up towards him does he realise he is accelerating towards the Earth.

So what is happening to the capsule and its contents? They are falling through a variable time field which we call the gravitational field. To say that the capsule has a force acting on it that is equal to its mass times the gravitational acceleration, as in Newtonian physics, is incorrect. The occupant feels no force.

Physics formulae should satisfy both the observer and the object. In the case of the falling capsule, the occupant feels no forces on him, but the observer on the ground says there is a force because the capsule is accelerating towards him. However, it is the observer on the ground who is like an observer on the stationary raft, where the raft is tied to the tree stump in the flowing river and the observer is watching another raft pass by. The observer has the force acting on him, not the falling capsule, and that force is the Earth's surface acting on his feet.

The fact is that gravity is like a flowing river of variable time. An object falling freely in a gravitational field has no force acting on it. Only when the object is stopped in the field, as we are on the surface of the Earth, does a force act—and that is what gives us sore feet if we stand up for too long, and a sore rear if we sit down for too long.

It should also be noted that Newton himself wisely stated that his laws of gravitation assume that "time" is a constant throughout the universe. We now know that that is an incorrect assumption. His laws effectively replace a "variable time field" with a force—which gives an adequate explanation in most cases.

If we apply Newton's laws to stationary objects on the Earth's surface, then an object receiving a force and an observer watching the event both express similar views as to what has happened, and such events satisfy the theory. However, this is not so for objects falling through gravitational fields. Therefore there must be a more adequate explanation.

The dimension of space is similar to an artist's blank canvas, only in three dimensions.

The various dimensions of time are like the paint that the artist uses to make a picture.

THE DIMENSIONS OF SPACE AND TIME

Consider the hypothesis that there are various types of dimensions such as time, space, feelings, sound, etc., and that these dimensions can be considered separately or in conjunction with each other. Within these dimensions there are sub-dimensions. In the dimension of space, for example, we know there are sub-dimensions of a straight line: area and volume.

Consider the hypothesis that the physical world, such as our home, our car and even ourselves, exists in the dimensions of space and is made from the dimension of time. That is, our home, our car and even ourselves are made from the dimension of time.

We also have brains that give us the software to allow us to explore various areas of the other dimensions from stimulations from the world around us: colour through light; sound and music through the vibration of molecules; and feelings through sight, sound and touch. But these other dimensions are another journey.

So the observed universe is made up of various dimensions of space and time. The dimension of space is similar to an artist's blank canvas, only in three dimensions.

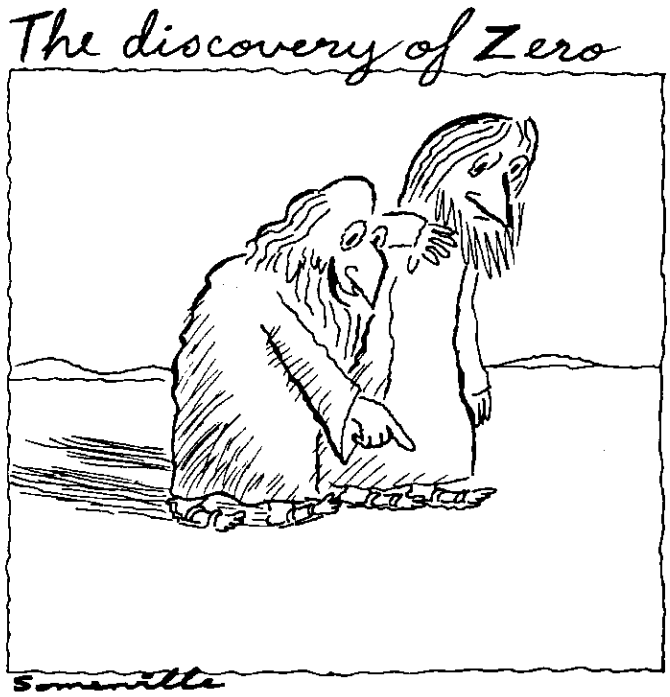
The various dimensions of time are like the paint that the artist uses to make a picture. The various dimensions of time result in gravity, electricity, magnetism, light, matter and everything that physically exists in the space dimensions.

The dimension of space has no time dimension. It only exists if time exists. It can have infinite length in all directions. It can exist in a single dimension as a straight line, in two dimensions as an area, in three dimensions as a volume, and maybe it can fold up into four or more dimensions, all at an instant or for any length of time depending on the shape and form of the time dimension.

TIME DIMENSIONS

Time is motion. Consider the hypothesis that the dimensions of time manifest themselves in the dimensions of space as tiny 'dots' at zero time. Because time and motion are one and the same, these tiny dots are travelling at a very high speed. These dots of time travel in dimensions in a straight line, or curled up into an area, or as a volume by the area moving, or folded up into further dimensions.

The dimensions of time have no space dimensions, and the dimensions of space have no time dimensions.



First Dimension of Time

The first dimension of time is where the dots (or particles) of time travel in a straight line. These dots emanate from all matter, and there are billions of them per square centimetre travelling continuously in all directions in our space. Most of the dots that pass through us have come from the matter of the Earth, but others have come from the Sun and planets, and still others from the matter in the Milky Way galaxy and more distant galaxies.

The Earth and the Moon, each other's influence aside, are moving in a similar sea of dots resulting from the various masses in the universe. The effect of these dots of time from a mass like the Earth is the creation of a variable time field—and a variable space field—around the Earth. This is commonly referred to as a "gravitational field", where the intensity of the field is greatest the closer one is to the mass.

I use the term "gravitons" to describe these tiny dots that travel in a straight line, because they create gravitational fields. (This definition for gravitons may vary from others.) They pass through all matter without a blink, and because they are not oscillating like an electromagnetic wave but still exist at zero time, they must travel faster than the speed of light. This will be explained later.

Because an observer on the Earth's surface is not at zero time, these tiny dots or gravitons appear and behave

to us as small strings. This is similar to a blurred picture of a fast-moving object. Far out in space where the gravitational field is very weak, these tiny strings become very long strings. The very weak time fields far out in space, as a result of gravitons from all the matter elsewhere in the universe, are the gravitational influences that control the motion of the galaxies.

So where do these dots or gravitons come from?

Gravitons obviously come from all matter. If they come from all matter, then one possibility is that there is some form of decay going on, that has been going on for billions of years for as long as the universe has existed. If matter is decaying to produce gravitons, then there must be a weakening of the gravitational field.

If the gravitational field is weakening due to graviton emissions, then the Moon should be receding from the Earth and the Earth from the Sun. Galaxies should be receding from each other due to the gravitational field weakening.

Is there an alternative explanation to matter decaying in order to produce gravitons?

It may be hypothesised that protons and neutrons in the nucleus are sieves that allow the dots of time (gravitons) from the time dimension into the space dimension. Black holes take the dots of time in their various forms—such as gravitons, electricity, magnetism, light and matter—out of the space dimension and back to the time dimension to be recycled.

This is an important concept because it allows the time dimension to be accessed not only via black holes, but by mini black holes in the form of sieves through nuclear particles. This concept of accessing the time dimension with mini black holes is important. Time has no space dimension, and this is useful in the understanding of space travel.

The space dimension has no time dimension, and the time dimension has only particles that exist at zero time and travel at a very fast speed.

Because the time dimension has no space dimension, the velocity of a particle, in time units, is the change in time of the particle per second (sec/sec) relative to a standard clock at the Earth's surface. When space and time dimensions are jointly considered, which is our everyday experience, then the velocity of a particle or mass is in units of metres per second (m/sec).

The space dimension has no time dimension, and the time dimension has only particles that exist at zero time and travel at a very fast speed. (A photon of light, to exist at zero time, has the speed of light; a graviton, to exist at zero time, has a speed considerably faster than light.)

When the space and time dimensions overlap, as they do in a gravitational field, then the unit of time varies from zero to infinitely large depending on the structure of the graviton field. It varies between being infinitely large (zero time), as in a black hole or a graviton, to being very small and passing infinitely quickly, as it does far out in space where there are far fewer gravitons.

Second Dimension of Time

The second dimension of time occurs when these tiny dots spin and oscillate in an area at high speed (zero time) at subatomic particle size. These tiny areas of two-dimensional time manifest themselves as the electric field. Their spin produces a static two-dimensional time field, and the spin direction determines what is called its "positive or negative charge", the units of time being sec^2/sec.

Third Dimension of Time

The third dimension of time is when the second dimension of time moves relative to an observer; in other words, it is a moving, circular area of time. This third dimension is a volume of time and manifests itself as a magnetic field (moving electric field). Again, it has a positive or negative charge depending on spin, the units of time being sec^3/sec.

Fourth Dimension of Time

When a dot travels in a straight line, it develops the first dimension of time. When it spins or oscillates in a plane, it develops the second dimension of time. When it spins or oscillates in a plane and travels in a straight line at right angles to the first plane, it has three dimensions of time (photon). When a dot of time spins or oscillates in one plane and then spins or oscillates in another plane at right angles to the first plane, it is moving about a point in three dimensions, and, depending on the rate of oscillations or spins, it develops various nuclear particles. The higher the vibrations, the smaller the particle.

Higher Dimensions of Time

When a dot of time travels in three dimensions about a point, as outlined above, it has to oscillate about that point. Fifth and other dimensions can be created by the motion of this point.

PHYSICS OF GRAVITONS

Gravitons have been defined as dots of time in the first dimension that are generated from all matter and travel through all matter. They are difficult to detect, but they would appear to us as small strings because we exist at a finite time change. When gravitons enter the space dimension they cause it to exist for a finite time adjacent to their path. Because there are billions of gravitons travelling in all directions around us, space exists continuously.

The formation of gravitational fields is generally from heavenly bodies that are spherical in shape, like the Earth, and so the graviton field is radiating from these heavenly bodies. These radiating gravitons produce "shells of equal time" around heavenly masses like the Earth. These shells of equal time have been confirmed in US Navy experiments when atomic clocks were taken to various altitudes and their rates of time compared with those of standard atomic clocks on Earth.

Gravitons radiate from matter in a stream, and interact with and open up a volume of the space dimension. If we travelled on a graviton, our unit of time would be infinitely long and the distance travelled would be zero, although the distance travelled by the graviton to an observer may be thousands of light years.

A continuous graviton stream causes the space adjacent to its path to exist, to open for the period of time of the graviton stream, and causes the space along the graviton path to be reduced.

When billions of atoms form a mass such as the Earth, and each atom radiates a stream of gravitons (similar to a stream of photons developing light rays), then billions of single-dimensional graviton paths are generated and these interact with the existing three-dimensional space field. This results in what we call a gravitational field.

These streams of gravitons from a mass are random. They

reduce the space along their path and develop a radiating time field. The reduced space along these randomly radiating graviton streams produces a varying space field.

The varying time field from the gravitons also allows the space between the graviton streams to exist continuously.

A single graviton generates a small packet (or particle) of zero time and zero length. It also opens up a small pocket of space adjacent to its path. A stream of continuous gravitons in a straight or curved line (the curved line occurs when a body like the Earth is rotating) produces a straight or curved line in the space dimension of zero time and zero length.

When billions of streams of gravitons radiate in a random manner from the billions of atoms that make up a mass like the Earth, then overlapping space and time fields develop. This is what we call a gravitational field.

However, a gravitational field is not merely a four-dimensional space-time field. It is a single dimension of time influencing the three space dimensions in the vicinity of a graviton stream, this then occurring billions of times in the three dimensions of space.

It is interesting that the gravitational field acts in the opposite direction to the motion of the gravitons and is dependent on the structure of the graviton field and not the direction of the gravitons themselves.

In saying that a gravitational field is a four-dimensional space-time field, this infers that the three dimensions of space and the dimension of time are inseparable, that they can't exist without the four dimensions wrapped up together. This is what Einsteinian physicists believe—that all four dimensions, one of time and three of space, are wound around each other in a form of inseparable four-dimensional fabric. This is where I disagree.

Gravitational fields are only a specific type of time field. I will deal with other time fields, such as those created by spinning discs, and how they form, in more detail shortly.

This is not to say that general relativity theory does not give viable answers, but it is very complex and has very limited practical use. It ties the first dimension of time and the three dimensions of space together. It gives a correct solution to a problem that involves the overlapping of both the space dimension and the time dimension, but it is incorrect in its insistence that the space and time dimensions cannot be considered separately.

General relativity, it appears, can be considered as an extension of the analysis of a graviton, using special relativity theory for a single-dimensional particle and then extending over three dimensions of space. Even if four-dimensional space-time were determined by the direction of motion of the gravitons (which it is not), this would still be no justification to cast in stone (as the Einsteinian physicists do) that space and time are inseparable in a gravitational field. It is no more valid than to state that a straight line, a single dimension of space, cannot be independently analysed and separated from a volume, which is three-dimensional space. It is done every day when a child draws a line with a ruler.

To understand the gravitational field, it is necessary to have a theory on how nature develops the gravitational field, and then to check this with the observed facts. It is only a part of the journey of discovery to rely on observations—as has occurred with Kepler and Newton. We have to ask the question so often put by Professor Julius Sumner-Miller: "Why is it so?"

Gravitons in this hypothesis are the creators of gravitational fields, and their radiating intensity from a heavenly body creates a variable time field (and a varying space field) that we call gravity.

Gravitons acting in three dimensions of space around a heavenly body also create a varying space field. This varying space field is only negligible in gravitational fields as weak as that of the Earth, and need not be considered. More importantly, it is the varying time field, not the varying space field, that causes motion.

FLYING SAUCERS AND ARTIFICIAL TIME FIELDS

There is an important point in our discussion so far in relation to flying saucers, and it involves forces. Gravitational fields are not force fields, and no force acts on an unrestrained mass in a variable time field.

An artificial variable time field generated by a flying saucer to change its direction will therefore exert no force on the pilot or the craft, so long as they are in the field, as they change their direction to accommodate the new gravitational field. This allows high-speed manoeuvring with lightweight craft and no "g-forces" on the occupants of the flying saucer.

The beings flying the saucers appear not to be subject to the massive g-forces our pilots experience. It is therefore a high probability that they exist in an antigravitational field along with the flying saucer.

When a force is used to change the direction of a craft in a gravitational field, as with a *Phantom* jet or a MiG fighter, then massive g-forces occur on the pilot and the plane. Although the pilot may have on a gravity suit, he and his craft are unable to take more than 6 or 8 g, and this limits the manoeuvrability and design of present-day jet fighters.

However, flying saucers out-manoeuvre fighter planes with the equivalent of 100 or 200 g, and this helps explain the cover-up by governments and military authorities in relation to flying saucers. No wonder they have instituted a cover-up! The authorities are worried because the flying saucers have a superior technology—they out-manoeuvre our best fighter planes and have even caused pilots to die while trying to chase them—and everyone wants to know about this technology! Well, read on!

TIME-FIELD PROPULSION SYSTEM

Investigations by experts at the sighting locations of flying saucers identify no chemical propulsion system such as rocket fuel or fuel from combustion engines. There are no Geiger counter readings from nuclear radiation by-products, had fission of uranium or plutonium been used. However, there is often a small background reading of magnetic radiation.

Often during these sightings, car headlights fail and engines stop, but this effect is more likely a part of the field around the craft than a cause of the propulsion system.

So the propulsion system must be related to the intelligence controlling the flying saucers having a better understanding of the laws of physics than we do.

The beings flying the saucers appear not to be subject to the massive g-forces our pilots experience. It is therefore a high probability that they exist in an antigravitational field along with the flying saucer.

The propulsion system is very likely a time field, and not a force field as with the rocket or jet propulsion that our fighter pilots use to manoeuvre their craft.

We shall now look at different types of time fields.

SPINNING DISCS AND TIME FIELDS

When I was a young boy, at Luna Park in Sydney there was a large building called "Coney Island" with a range of fun things to do. One of the attractions was a large, smooth disc. We would jump on the disc and it would begin to spin. Those on the disc, except for the one sitting in the centre, would be spun off.

In my early days of thinking about this physics, I went back to Coney Island (before Luna Park was closed due to an accident on the Ghost Train) and watched the children on the spinning disc. As the disc began to spin, those sitting on it would slide off. But there were some interesting observations that I made:

1) Whatever it was that made those sitting on the disc slide off, it had the same effect as a gravitational field.

2) As the children were sliding off the smooth disc, their clothes were not being pulled as would happen if forced. Only when they hit the stationary floor was there no uniform motion.

3) The children furthest from the centre of the disc were the first to begin to slide.

4) The children moved in a direction at right angles to the motion of the disc.

We know from special relativity that the change in time on a particle is related to the speed of the particle. (In fact, it is proportional to the square of the speed of the particle.)

Newtonian physics says that a force acts on a mass fixed to a spinning object, and this is correct if the object is fixed. It also states that the acceleration acts radially and is proportional to the velocity squared, and inversely proportional to the radius.

The spinning disc can therefore be considered a variable time field or an artificial gravitational field. It has concentric circles of time, with the intensity of the time field increasing away from the centre.

Now if an object is free to move on the surface of a spinning disc, what is happening? The spinning disc and the people spinning on it create a variable time field. The particles that make up the people on the moving disc have created, because of their motion, a varying time field, and this is the same as a gravitational field. The children are 'falling' sideways, in a similar way to falling in a gravitational field.

The spinning disc can therefore be considered a variable time field or an artificial gravitational field. It has concentric circles of time, with the intensity of the time field increasing away from the centre. The time field and the motion that results from the field on a mass are not related to any space change, and that is why the space and time dimensions can be separated (as previously discussed under "Physics of Gravitons").

The spinning disc creates a very interesting time field because of the way it is formed. The direction of motion of an unrestrained mass in this field is at right angles to the motion of the particles that make up the disc. So the direction of motion of a mass in a variable time field is not determined by the direction of the particles that make up the time field, but by the direction of the intensity of the time field.

In the Earth's gravitational field the gravitons are travelling away from the Earth, but a mass falls towards the Earth's centre because that is the direction of the intensity of the time field. With a rotating disc, an unrestrained mass falls at right angles to the disc's motion and away from its centre because that is the direction of the intensity of the time field.

The direction of motion of the gravitons in the case of the Earth, and the direction of motion of the mass on the disc are irrelevant. The change in the space dimension in both cases is also irrelevant. What is relevant to the motion of an unrestrained object is the time field created and its direction of intensity.

If gravitons travelled along the same path but in the opposite direction, towards the centre of the Earth, then the same gravitational time field would result.

Alternatively, the same density of gravitons could travel in shells around the Earth and the same gravitational field would result. (There would be a slight variation in the space field, but this is negligible.)

With a different configuration of gravitons, a time field can be created where a mass falls away from the centre of the Earth, as a mass does on a rotating disc, or alternatively it can freely move in any direction depending on the intensity of the time field.

So, Einstein's general theory of relativity is a mathematical explanation of the overlapping space and time fields that develop as a result of the configuration of the graviton field in three dimensions of space. It may give adequate answers, but in no way is it written in stone that the four dimensions of space-time are inseparable.

FLYING SAUCERS AND THE PHYSICS OF TIME

Flying saucers act in interesting ways. They can hover and travel at low speed. They can travel at great speed. They can manoeuvre freely and perform any type of aerobatics at great speed. They appear to have no g-forces acting on them. They can disappear. They can be silent. They defy our current laws of physics. They appear to be of solid structure and controlled by some form of intelligence.

There appear to be two general types: the saucer shape, and the type that looks like a long, elongated football and is often known as a "mother ship". The saucer-shaped craft have been seen to fly into the large mother-ships which are probably used as "cosmic aircraft-carriers" for storage of craft, accommodation, and for intergalactic flight. How do the mother ships travel around the cosmos? How do they remain invisible?

Before I tackle the big questions—like the design of flying saucers, how they manoeuvre and disappear, and other related technologies—it is necessary first to develop the equations of motion of a mass moving in a gravitational time field, and to see that these equations satisfy reality. It needs to be shown how these equations differ from Newtonian physics. This is important because Newtonian physics does give accurate explanations to observed phenomena.

The time equations for the gravitational field will be used to explain the physics of flying saucers and the reasons why they are so manoeuvrable. Time equations will then be developed for the second dimension of time, the electric field; and, next, the third dimension of time equations for the magnetic field. Then the gravitational, electric and magnetic fields can be unified.

It will also be seen that flying saucers and their mother ships use the physics of time in the first dimension to manoeuvre in gravitational fields, and advanced third-dimensional-time physics for intergalactic travel and for enabling them to disappear from sight in an instant.

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MISCONCEPTIONS OF EINSTEINIAN PHYSICS

Einstein developed his general theory of relativity from a mathematical base using four-dimensional space-time. He did not, it appears, indicate the physical reasons for his assumptions. He chose not to outline the natural causes for his assumption that space and time are inseparable and that gravity is an intertwined four-dimensional field. However, it is commonly accepted by Einsteinian physicists that space and time are inseparable.

Gravitons emanating from all matter may have been assumed by Einstein, or he may have developed his theory from observation.

In his book, *Einstein's Universe*, Nigel Calder stated, "...one can describe gravity and the deformation of space-time in terms of mutually interacting gravitons, and arrive at the same answers as Einstein's".

So, using the assumption of gravitons does produce similar results to Einstein's.

Calder further stated: "...gravity waves are said to consist of gravitons...gravitons themselves possess energy and are therefore heavy, so they themselves are vulnerable to the action of other gravitons...they are therefore deflected along curved tracks. This incest among the gravitons produces the curvature of space."

A question we have to ask is whether we are considering the same particle we call a graviton. It does not really matter. The graviton field which produces a gravitational field around a mass is a large number of particles travelling at zero time and radiating from the mass.

The real question is whether the space and time fields can be separated. This has been answered previously. It is because the time field developed around a spinning disc is at right angles to the direction of motion, and the same gravitational field would develop around the Earth if the gravitons were travelling towards the Earth and not away from it.

There are two problems with current laws of physics which can cause confusion. The first is that they mix up different dimensions. For example, the velocity of a particle is in metres/sec, when it could be expressed as the change in a sec/sec. This is a simple example, but it keeps all the units in time dimensions.

The second problem is that laws of motion are based on the observer's view of what is happening, rather than on what is experienced by the object itself. Often the observer is not aware of the existence of time fields between himself and the object—leading to comments like "the force of gravity", "the centrifugal force", "the nuclear force", "the electric and magnetic forces". If the object and not the observer is considered when developing laws of motion, then such statements are inaccurate because these "forces" are time fields. This is important, especially in the design of craft that have to function in these fields. ∞

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